

## **CLAIMS**

What is claimed is:

1. An air induction body assembly for a vehicle, comprising:  
a carrier having a first sealing interface for a manifold and a second sealing interface for an engine cylinder;  
at least one air opening extending through said carrier, said at least one air opening for communicating air to the engine cylinder; and  
at least one valve mounted to said carrier, said at least one valve for controlling the communication of air through said at least one opening.
2. The air induction body assembly of Claim 1 wherein said valve comprises a flap.
3. The air induction body assembly of Claim 2 wherein said flap is pivotally mounted to said carrier by a shaft.
4. The air induction body assembly of Claim 3 wherein said flap has a first end portion, a middle portion, and a second end portion, said shaft mounted to said flap at one of said first end portion and said second end portion.
5. The air induction body assembly of Claim 3 wherein said flap has a first end portion, a middle portion, and a second end portion, said shaft mounted to said flap at said middle portion.

6. The air induction body assembly of Claim 3 wherein said shaft is mounted on said carrier by a bearing surface.
7. The air induction body assembly of Claim 6 wherein said bearing surface comprises a ball bearing.
8. The air induction body assembly of Claim 6 wherein said bearing surface comprises a sleeve.
9. The air induction body assembly of Claim 1 including an actuator for controlling said at least one valve, said actuator mounted to said carrier.
10. The air induction body assembly of Claim 1 including at least one seal disposed on one of said first sealing interface and said second sealing interface.
11. The air induction body assembly of Claim 1 wherein said at least one air opening comprises a plurality of air openings and said at least one valve comprises a plurality of valves for controlling air through said plurality of air openings.
12. The air induction body assembly of Claim 1 wherein said carrier has a support for a fuel injector.

13. The air induction body assembly of Claim 12 including a fuel injector supported by said support.

14. The air induction body assembly of Claim 12 including at least one wire embedded in said carrier to power said fuel injector.

15. An air induction manifold assembly for a vehicle, comprising:
  - an air induction manifold having at least one manifold air passage;
  - a carrier having at least one carrier air passage in communication with said at least one manifold air passage, said air passages for communicating air to an engine;
  - said carrier having a first sealing interface for a manifold and a second sealing interface for an engine cylinder, said first sealing interface for sealing the communication of air between said at least one manifold air passage and said at least one carrier air passage; and
  - at least one valve mounted to said carrier, said at least one valve for controlling the communication of air through said at least one opening.
16. The air induction manifold assembly of Claim 15 wherein said valve comprises a flap.
17. The air induction manifold assembly of Claim 16 wherein said flap is pivotally mounted to said carrier by a shaft.
18. The air induction manifold assembly of Claim 15 including an actuator for controlling said at least one valve, said actuator mounted to said carrier.
19. The air induction body assembly of Claim 15 including a fuel injector supported by said carrier.

20. A method of manufacturing an air induction body, comprising the steps of:

providing an air passage through a support;

pivotally mounting a flap on the support;

placing the air passage in communication with an air intake manifold;

and

sealing the air passage against the manifold.